

JUN 07 2002

TECH CENTER 1600/2900





1646

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/777,921A

DATE: 05/30/2002 TIME: 10:21:33

Input Set : A:\1103 SUBSTITUTE_SEQLIST.TXT Output Set: N:\CRF3\05302002\I777921A.raw

- 4 <110> APPLICANT: MERKULOV et al.
- 6 <120> TITLE OF INVENTION: ISOLATED HUMAN TRANSPORTER PROTEINS,
- NUCLEIC ACID MOLECULES ENCODING HUMAN TRANSPORTER PROTEINS,
- AND USES THEREOF
- 10: <130> FILE REFERENCE: CL001103
- 12 < 140 > CURRENT APPLICATION NUMBER: 09/777,921A
- C--> 13 <141> CURRENT FILING DATE: 2002-02-07
 - 15 <160> NUMBER OF SEQ ID NOS: 126
 - 17 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 - 19 <210> SEO ID NO: 1 20 <211> LENGTH: 2673
 - 21 <212> TYPE: DNA
 - 22 <213> ORGANISM: Homo sapiens
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 - 28 gccaggacgc ggagcagccg acgcgctacg agaccctctt ccaggcactg gaccgcaatg 240
 - 29 gggacggagt ggtggacate ggcgagctgc aggaggggct caggaacctg ggcatccctc 300
 - 30 tgggccagga cgccgaggag aaaattttta ctactggaga tgtcaacaaa gatgggaagc 360
 - 31 tggattttga agaatttatg aagtacctta aagaccatga gaagaaaatg aaattggcat 420

 - 32 ttaagagttt agacaaaaat aatgatggaa aaattgaggc ttcagaaatt gtccagtctc 480
 - 33 tocagacact gggtotgact atttotgaac aacaagcaga gttgattott caaagcattg 540
 - 34 atgttgatgg gacaatgaca gtggactgga atgaatggag agactacttc ttatttaatc 600
 - 35 ctgttacaga cattgaggaa attatccgtt tctggaaaca ttctacagga attgacatag 660
 - 36 gggatagett aactatteea gatgaattea eggaagaega aaaaaaatee ggacaatggt 720
 - 37 ggaggcaget tttggcagga ggcattgctg gtgctgtctc tcgaacaagc actgcccctt 780
 - 38 tygaccytct qaaaatcatg atgcaggttc acggttcaaa atcagacaaa atgaacatat 840
 - 39 ttggtggctt tcgacagatg gtaaaagaag gaggtatccg ctcgctttgg aggggaaatg 900
 - 40 gtacaaacgt catcaaaatt gctcctgaga cagctgttaa attctgggca tatgaacagt 960
 - 41 acaagaagtt acttactgaa gaaggacaaa aaataggaac atttgagaga tttatttctg 1020
 - 42 gttccatggc tggagcaact gcacagactt ttatatatcc aatggaggtt atgaaaacca 1080
 - 43 ggctggctgt aggcaaaact gggcagtact ctggaatata tgattgtgcc aagaagattt 1140
 - 44 tgaaacatga aggcttggga gctttttaca aaggctatgt tcccaattta ttaggtatca 1200

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 - 51 cccagaaatg atgttgcatt ttttgcttta gcctgataat tgaaactttc aacaatctct 1620
 - 52 ggagtgactt tttctcctcg aattgaaaca agtctatggc aaaaqaagct gcattttttt 1680
 - 53 cacaaaaggg aagacggtaa caatggtcac ttcaaacttt tgggctaaat tatatgtaca 1740

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81 Arg Asn Gly Asp Gly Val Val Asp Ile Gly Glu Leu Gln Glu Gly Leu
83 Arg Asn Leu Gly Ile Pro Leu Gly Gln Asp Ala Glu Glu Lys Ile Phe
85 Thr Thr Gly Asp Val Asn Lys Asp Gly Lys Leu Asp Phe Glu Glu Phe
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                                           75
87 Met Lys Tyr Leu Lys Asp His Glu Lys Lys Met Lys Leu Ala Phe Lys
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89 Ser Leu Asp Lys Asn Asn Asp Gly Lys Ile Glu Ala Ser Glu Ile Val
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91 Gln Ser Leu Gln Thr Leu Gly Leu Thr Ile Ser Glu Gln Gln Ala Glu
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93 Leu Ile Leu Gln Ser Ile Asp Val Asp Gly Thr Met Thr Val Asp Trp
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95 Asn Glu Trp Arg Asp Tyr Phe Leu Phe Asn Pro Val Thr Asp Ile Glu
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99 Ser Leu Thr Ile Pro Asp Glu Phe Thr Glu Asp Glu Lys Lys Ser Gly
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101 Gln Trp Trp Arg Gln Leu Leu Ala Gly Gly Ile Ala Gly Ala Val Ser
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103 Arg Thr Ser Thr Ala Pro Leu Asp Arg Leu Lys Ile Met Met Gln Val
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107 Met Val Lys Glu Gly Gly Ile Arg Ser Leu Trp Arg Gly Asn Gly Thr
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                                         250
109 Asn Val Ile Lys Ile Ala Pro Glu Thr Ala Val Lys Phe Trp Ala Tyr
110
                260
                                     265
111 Glu Gln Tyr Lys Lys Leu Leu Thr Glu Glu Gly Gln Lys Ile Gly Thr
112
113 Phe Glu Arg Phe Ile Ser Gly Ser Met Ala Gly Ala Thr Ala Gln Thr
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115 Phe Ile Tyr Pro Met Glu Val Met Lys Thr Arg Leu Ala Val Gly Lys
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                                             315
117 Thr Gly Gln Tyr Ser Gly Ile Tyr Asp Cys Ala Lys Lys Ile Leu Lys
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119 His Glu Gly Leu Gly Ala Phe Tyr Lys Gly Tyr Val Pro Asn Leu Leu
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                                    345
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123 Lys Ser Tyr Trp Leu Asp Asn Phe Ala Lys Asp Ser Val Asn Pro Gly
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                                                 380
125 Val Met Val Leu Leu Gly Cys Gly Ala Leu Ser Ser Thr Cys Gly Gln
126 385
                        390
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127 Leu Ala Ser Tyr Pro Leu Ala Leu Val Arg Thr Arg Met Gln Ala Gln
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129 Ala Met Leu Glu Gly Ser Pro Gln Leu Asn Met Val Gly Leu Phe Arg
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                                     425
131 Arg Ile Ile Ser Lys Glu Gly Ile Pro Gly Leu Tyr Arg Gly Ile Thr
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133 Pro Asn Phe Met Lys Val Leu Pro Ala Val Gly Ile Ser Tyr Val Val
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142 <213> ORGANISM: Homo sapiens
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147 <223> OTHER INFORMATION: n = A, T, C or G
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152 caatteeett eeegetagte acaactggta actaetgatt tgttttetgt eeetatagtt 180
153 ttgccttttc cagaatgtca ttgttgacag gtatcagtaa ttcattcctt tttattgcta 240
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155 attttgtttc tgcgcttgac agttatgaat agaactgcta taaaccctca agtaaaagtt 360
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157 tttttaaaaa agtaaaatag cctgtagccc cagctactca ggaggctgag gcaggagaat 480
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RAW SEQUENCE LISTING

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Input Set : A:\1103 SUBSTITUTE_SEQLIST.TXT
Output Set: N:\CRF3\05302002\1777921A.raw

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

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Seq#:3; N Pos. 52002,52003,52004,52005,52006,52007,52008,52009,52010,52011
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RAW SEQUENCE LISTING ERROR SUMMARY DATE: 05/30/2002 PATENT APPLICATION: US/09/777,921A TIME: 10:21:34

Input Set : A:\1103 SUBSTITUTE_SEQLIST.TXT
Output Set: N:\CRF3\05302002\1777921A.raw

Seq#:3; N Pos. 52012,52013,52014,52015,52016,52017,52018,52019,52020,52021

Seq#:3; N Pos. 52022,52023,52024,52025

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/777,921A

DATE: 05/30/2002 TIME: 10:21:34

Input Set : A:\1103 SUBSTITUTE_SEQLIST.TXT
Output Set: N:\CRF3\05302002\1777921A.raw

L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:349 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:11940
L:549 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:23940
L:550 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:24000
L:551 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:24060
L:552 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:24120
L:553 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:24180
L:554 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:24240
L:1015 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:51900
L:1016 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:51960
L:1017 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:52020